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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,578	04/08/2004	Lott Johnson	5115-001	8573
24112 7590 01/25/2008 COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518				
EXAMINER				
BOSWELL, CHRISTOPHER J				
ART UNIT		PAPER NUMBER		
3673				
MAIL DATE		DELIVERY MODE		
01/25/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/820,578

Applicant(s)

JOHNSON, LOTT

Examiner

CHRISTOPHER BOSWELL

Art Unit

3673

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-15 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date _____

DETAILED ACTION

In view of the Appeal Brief filed on October 8, 2007, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

/Patricia L Engle/

Supervisory Patent Examiner, Art Unit 3673.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 3,016,968 to Lenz et al., in view of U.S. Patent Number 4,170,374 to Garcia.

Lenz et al. disclose the invention substantially as claimed. Lenz et al. disclose a vacuum actuated door latching assembly having a latch (figure 2) operatively associated with the door (1), a pneumatic actuator (26) operatively associated with the latch for causing the latch to move between the locked and unlocked positions, a vacuum line (37) connected to the pneumatic actuator and adapted to connect to a vacuum source (41) associated with the vehicle, and a control valve (39) disposed between the vacuum source and the pneumatic actuator for controlling the activation of the pneumatic actuator, as in claim 1. However, Lenz et al. does not disclose a biasing device engaging the door. Garcia teaches of an automatic vehicle door latching assembly (22) having a latch (30) and a biasing device (49) engaging a door (20) in the same field of endeavor for the purpose of biasing the door towards an open position (column 4, lines 37-44), where the biasing device has a spring (54), as in claim 6, where the spring is adapted to extend between a stop (74) disposed on the door and an area (42) adjacent the door, and wherein the position of the spring is adjustable with respect to the door (by adjusting the length of the shank 52), as in claim 7, where the spring is partially contained within a sleeve (50, i.e. a boot), as in claim 8. It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate a biasing device near the latch of Lenz et al., as taught by Garcia, in order to bias the door to an open position, such that it decreases the amount of work needed to open the door.

Lenz et al. also discloses the latch having a locking lever (5) that is pivotally mounted and movable between a locked and unlocked position, wherein the pneumatic actuator includes

an arm (30) that engages the locking member and moves the locking member in at least one direction between the locked and unlocked positions (column 2, lines 7-20), as in claim 2, as well as a conventional key lock (22) but wherein the pneumatic actuator is operative to actuate the latch independent of the key lock (column 1, lines 17-21), as in claim 3.

Lenz et al. further disclose the locking lever is of a generally L-shape and includes a terminal end portion (figure 2) that includes a catch (9) for engaging a receiver (4) secured to the door to be latched, as in claim 4.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lenz et al., in view of Garcia, as applied above, in view further of U.S. Patent Number 2,801,309 to Higbie et al.

Lenz et al. and Garcia disclose the invention substantially as claimed. However, Lenz et al. and Garcia do not disclose the spring being housed in an elongated sleeve as well as the spring being secured to a threaded bolt held in a threaded support. Higbie et al. teaches of a door switch assembly having a spring (27) positioned adjacent to a door when the door is in a closed position, the spring being disposed within an elongated sleeve (12) mounted to a frame of a vehicle (10), wherein the elongated sleeve is threadably secured to the frame via screw threads (column 2, lines 16-19), such that as soon as the door is opened, the spring will urge a shaft (24) in one direction so that the electric circuit to a suitable source of illumination will be closed through the engagement between the switch contact end portion and the connector (column 3, lines 4-9) and illuminate the contents held within the door and frame in the analogous art of spring biased assemblies contiguous to a vehicle door for the purpose of activating a source of illumination automatically whenever a vehicle door is opened. It would have been obvious to

one with ordinary skill in the art at the time the invention was made to incorporate an illumination source, as taught by Higbie et al., where the biasing device of Lenz et al. and Garcia would be mounted via a threaded bolt and contained within an elongated sleeve in order to activate a source of illumination automatically whenever a vehicle door is opened.

Claims 1-8, 10-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia, in view of Lenz et al.

Garcia discloses the invention substantially as claimed. Garcia discloses a delivery vehicle (1) having a latch assembly (22) for latching an access door (20) to a load compartment (26) having an engine for powering the vehicle (not shown but having an engine is inherent in motor vehicles), a compartment for receiving and holding a load (area accessible by opening 26), a sliding door (20) for permitting access to the compartment of the vehicle, as in claim 5, a latch assembly (22) comprising a latch (30) operatively associated with the door for locking the door, the latch being movable between a locked and unlocked position (column 2, lines 60-66), an actuator (34) operatively associated with the latch for causing the same to move between the locked and unlocked position (column 2, line 66-column 3, line 3), and a biasing device (49) for engaging the sliding door and biasing the door towards an open position (the spring force urges the keeper, an integral part of the door, toward the open position of the latch), the biasing device being spaced from the latch assembly (figure 2) and operable independently of the latch assembly (the biasing acts directly opposite and independent of the latching motion, wherein the spring biases the latch against the force of the door), and wherein the biasing device includes a spring (54), as in claim 6, disposed adjacent the door and positioned with respect to the door

such that when the door assumes a closed position, the spring engages the door and is compressed by the sliding door (column 4, lines 37-44), and wherein when the latch is moved from the locked position to the unlocked position the spring forces the sliding door to open (when the latch is moved from the locked position to the unlocked position, the force of the spring biases the door to an open position), as in claims 1 and 10. However, Garcia does not disclose the latch assembly being vacuum actuated. Lenz et al. teaches of a vehicle having a vacuum actuated latch assembly for latching an access door to a load compartment (figure 1), comprising an engine (column 2, lines 24-26) for powering the vehicle, a compartment (2) for receiving and holding a load, a door (1) for permitting access to the compartment of the vehicle, a vacuum actuated latch assembly (figure 2) for automatically unlocking the door, the vacuum actuated latch assembly having a latch (figure 2) operatively associated with a door for locking the door, the latch being movable between a locked and an unlocked position, a pneumatic actuator (26) operatively associated with said latch for causing the same to move between the locked and unlocked position, a vacuum line (37) connected to the pneumatic actuator and extending to the engine of the vehicle such that the engine of the vehicle serves as a vacuum source for the pneumatic actuator, and a control valve (39) disposed between the engine and the pneumatic actuator for controlling the actuation of the pneumatic actuator, the pneumatic actuator includes a pneumatic cylinder (figure 2), as in claim 11, as well as the latch includes a locking lever (5) for engaging a receiver (4) secured to the door, and wherein the pneumatic actuator includes an arm (30) for engaging and moving the locking lever from a locked position to an unlocked position, as in claim 12, and where the pneumatic actuator can only be actuated to unlatch the latch when the engine of the vehicle is running (column 2, lines 21-29), as in claim

13, wherein the latch normally assumes a locked position, and wherein the arm that extends from the pneumatic actuator is operative upon the actuation of the pneumatic actuator to engage the latch and move the latch to the unlocked position (column 2, lines 29-44), as in claim 14.

Because both Garcia and Lenz et al. teach methods for latching an access door to a load compartment, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of pneumatically actuating the latch assembly by a vacuum actuation assembly.

Garcia also discloses the latch having a locking lever (68) that is pivotally mounted and movable between a locked and unlocked position, wherein the actuator includes an arm (78) that engages the locking member and moves the locking member in at least one direction between the locked and unlocked positions (column 4, lines 34-61), as in claim 2, as well as a conventional key lock (108) but wherein the actuator is operative to actuate the latch independent of the key lock (column 4, lines 50-61 teaches the key operated mechanisms function independently of the actuator), as in claim 3, and further discloses the locking lever is of a generally L-shape (figures 2 and 3) and includes a terminal end portion (70) that includes a catch (68) for engaging a receiver (32) secured to the door to be latched, as in claim 4.

Garcia further discloses the spring is adapted to extend between a stop (74) disposed on the door and an area (42) adjacent the door, and wherein the position of the spring is adjustable with respect to the door (by adjusting the length of the shank 52), as in claim 7, where the spring is partially contained within a sleeve (50, i.e. a boot), as in claim 8

Garcia additionally discloses the latch includes a locking lever (68) for engaging a receiver (32) secured to the door, and wherein the actuator includes an arm (78) for engaging and

moving the locking lever from a locked position to an unlocked position, as in claim 12, and where the latch normally assumes a locked position, and wherein the arm that extends from the actuator is operative upon the actuation of the actuator to engage the latch and move the latch to the unlocked position (column 4, lines 24-61), as in claim 14.

Garcia also discloses a method of unlocking a sliding access door (20) to a load compartment of a delivery vehicle (10) comprising an actuator (34) that is operatively associated with a latch (22) that operates to lock the sliding access door and which is movable between a locked position and an unlocked position (column 4, lines 24-61), utilizing a circuit (36) to actuate the actuator and wherein the actuation of the actuator results in the actuator engaging the latch and moving the latch from the locked position to the unlocked position, permitting the sliding access door to open; shutting the engine off (column 4, lines 24-61), and closing the sliding access door causing the latch to lock the sliding access door (column 4, lines 37-42), biasing the sliding access door towards an open position while the latch assumes the locked position and locks the sliding access door closed (column 4, lines 32-33), wherein biasing the sliding access door towards an open position includes securing a spring (49) adjacent to the sliding access door and extending the spring to where the spring engages a stop (32) that extends from the sliding access door such that the spring pushes on the stop and effectively biases the sliding access door towards an open position (column 4, lines 32-33), and wherein the biasing of the sliding access door towards the open position is independent of the latch that operates to lock the sliding access door and wherein when the latch is moved from the locked position to the unlocked position (as shown in figures 2 and 3), the spring causes the sliding access door to

move towards the open position (column 4, lines 32-33), as in claim 15. However, Garcia does not disclose the latch assembly being vacuum actuated. Lenz et al. teaches of a method of unlocking a door to a load compartment of a vehicle by directing a vacuum from an engine of the vehicle through a line to a pneumatic actuator that is operatively associated with a latch that operates to lock the access door and which is movable between a locked position and an unlocked position (column 2, lines 21-29), utilizing the vacuum to actuate the pneumatic actuator and wherein the actuation of the pneumatic actuator results in the actuator engaging the latch and moving the latch from the locked position to the unlocked position, permitting the access door to open (column 2, lines 7-20), shutting the engine off, and closing the access door causing the latch to lock the access door (column 1, lines 45-49), as in claim 15, as well as including actuating a control valve that is effective to permit the vacuum to reach the pneumatic actuator and wherein when the vacuum reaches the pneumatic actuator, the pneumatic actuator is actuated which results in the latch being engaged and moved to the unlocked position (column 2, lines 29-36), as in claim 18. Because both Garcia and Lenz et al. teach methods for latching an access door to a load compartment, it would have been obvious to one skilled in the art to substitute one method for the other to achieve the predictable result of pneumatically actuating the latch assembly by a vacuum actuation assembly.

Garcia further discloses the actuator includes an arm (78) that extends past a portion of a locking lever (30) that forms a part of the latch assembly, wherein the actuation of the actuator causes the arm to move and to engage a portion of the locking lever which results in the locking lever being pulled from its locked position to an unlocked position (column 3, lines 38-51), as in claim 19, wherein the locking lever is pivotally mounted for movement about an axis (axis

defined by element 60) and wherein the actuation of the actuator causes the locking lever to rotate from a locked position to an unlocked position (column 4, lines 24-61), as in claim 20.

Claims 9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Garcia, in view of Lenz et al., as applied above, in view further of U.S. Patent Number 2,801,309 to Higbie et al.

Garcia and Lenz et al. disclose the invention substantially as claimed. However, Garcia and Lenz et al. do not disclose the spring being housed in an elongated sleeve as well as the spring being secured to a threaded bolt held in a threaded support. Higbie et al. teaches of a door switch assembly having a spring (27) positioned adjacent to a door when the door is in a closed position, the spring being disposed within an elongated sleeve (12) mounted to a frame of a vehicle (10), wherein the elongated sleeve is threadably secured to the frame via screw threads (column 2, lines 16-19), such that as soon as the door is opened, the spring will urge a shaft (24) in one direction so that the electric circuit to a suitable source of illumination will be closed through the engagement between the switch contact end portion and the connector (column 3, lines 4-9) and illuminate the contents held within the door and frame in the analogous art of spring biased assemblies contiguous to a vehicle door for the purpose of activating a source of illumination automatically whenever a vehicle door is opened. It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate an illumination source, as taught by Higbie et al., where the biasing device of Garcia and Lenz et al. would be mounted via a threaded bolt and contained within an elongated sleeve in order to activate a source of illumination automatically whenever a vehicle door is opened.

Response to Arguments

Applicant's arguments filed October 8, 2007, in view of claims 1-4 and 6-8, have been fully considered but they are not persuasive. In response to the argument that the motivation, to decrease the amount of work needed to open the door, to place the biasing device of Garcia into the latch assembly of Lenz et al. is unsupported, nor is there any implicit support for this motivation, the examiner respectfully disagrees. The applicant alleges that there is no problem opening a conventional trunk lid, the examiner half agrees. As the applicant should be aware of work is defined as the transfer of energy from one physical system to another, such that work is equal to the amount of force needed to move a system a desired distance. This being stated, in order to move the trunk lid of Lenz et al. to an open position at a predetermined distance a certain amount of force is needed, and thus causing work to open the lid. Additionally trunk lids can have some substantial weight to them as well as a close fit between the lid and the contiguous fenders and body panels causing it hard for a user to lift the trunk lid from the secured position. A biasing member placed between the body panels and the trunk lid would lessen the amount of work needed to initially lift the lid, allowing the user to acquire a better hand position to apply the force needed to completely open the lid. Additionally, with the biasing member initially lifting the lid lessens the chance the user would squish their fingers between the lid and the body panel.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTOPHER BOSWELL whose telephone number is (571)272-7054. The examiner can normally be reached on 9:00 - 4:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Engle can be reached on (571) 272-6660. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christopher Boswell
Examiner
Art Unit 3673

/Patricia L. Engle/
Supervisory Patent Examiner, Art Unit
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